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| 09/849,168 | 05/04/2001 | Phil Delurgio | DT:0101 | 1864 |
| 23669 | 7590 | 06/21/2005 | EXAMINER | |
| HUFFMAN LAW GROUP, P.C. 1832 N. CASCADE AVE. COLORADO SPRINGS, CO 80907-7449 | | | BYLCIW, STEPHEN | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 3623 | |

DATE MAILED: 06/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|------------------------------------|-------------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 09/849,168 | NEAL ET AL. | |
| | Examiner Stephen Bylcwiw | Art Unit 3623 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 05 May 2001.
 2a) This action is **FINAL**. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-39 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1-39 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 05 May 2001 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

| | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>see attached</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____ |

Information disclosure sheets for application 09/849168: 21 May 2001, 6 Aug 2001, 7 Sept 2001, 31 May 2002, 2 Sept 2003, 30 Sept 2003, 17 Feb 2004, 12 Jul 2004, 14 Sept 2004, 26 Oct 2004, 5 Nov 2004, and 7 Feb 2005.

DETAILED ACTION

1. This non-final office action is in response to the application filed in the United States on May 4, 2001. Claims 1 through 39 are pending in this application. This application is a continuation-in-part of application 09/741958 filed on December 20, 2000.

Information Disclosure Statement

2. The information disclosure statement filed September 2, 2003 fails to comply with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609 because a document (U.S. Patent 6,025,686 – Fernandez et al – 5/18/2000) does not exist. Perhaps the applicant intended U.S. Patent 6,052,686 - Fernandez et al – 4/18/2000. The reference to U.S. Patent 6,025,686 has been placed in the application file, but the information referred to therein has not been considered as to the merits. Applicant is advised that the date of any re-submission of any item of information contained in this information disclosure statement or the submission of any missing element(s) will be the date of submission for purposes of determining compliance with the requirements based on the time of filing the statement, including all certification requirements for statements under 37 CFR 1.97(e). See MPEP § 609 ¶ C(1).

Drawings

3. New corrected drawings (Figures 6 - 38) in compliance with 37 CFR 1.121(d) are required in this application because they are difficult to read. Applicant is advised to

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employ the services of a competent patent draftsperson outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

In addition, the title of Figure 4 has the word "Scenario" misspelled. The full title after the correction should be "Scenario/ Results Processor Details." Appropriate correction is required.

Specification

4. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The abstract for the disclosure is objected to because it is more than 150 words.

Appropriate correction is required. See MPEP § 608.01 (b).

5. The disclosure is objected to because of the following informality: the application "Apparatus For Merchandise Promotion Optimization" has serial number 09/849,621. This serial number is missing in the specification on page 1 (line 17).

Appropriate correction is required.

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6. The use of the trademarks (page 20, ¶¶61, lines 11 and 14; page 22, ¶¶62, lines 15 and 17; page 27, ¶¶71, lines 26 and 29; page 29, ¶¶73, line 6; page 63, ¶¶129, line 6) has been noted in this application. They should be capitalized wherever they appear and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner that might adversely affect their validity as trademarks.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

7. Claims 10, 30, and 39 are rejected under 35 U.S.C. 112, second paragraph because the claims identifications/ descriptions are indefinite

Claims 10, 30, and 39 contain the trademark/trade name JAVA™. Where a trademark or trade name is used in a claim as a limitation to identify or describe a particular material or product, the claim does not comply with the requirements of 35 U.S.C. 112, second paragraph. See *Ex parte Simpson*, 218 USPQ 1020 (Bd. App. 1982). The claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product. A trademark or trade name is used to identify a source of goods, and not the goods themselves. Thus, a trademark or trade name does not identify or describe the goods associated with the trademark or trade name. In the present case, the trademark/trade name is used to identify/describe an "applet" and, accordingly, the identification/description is indefinite.

In order to overcome this rejection it is respectfully suggested that the claims be amended to remove the trademark (JAVA™) and leave the appropriate generic name (applets). Appropriate correction is required.

Double Patenting

8. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

9. Claims 1 and 2 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of Delurgio - U.S. Patent 6,553,352 (Delurgio '352). Although the conflicting claims are not identical, they are not patentably distinct from each other (MPEP § 802.01). The only difference between the patent and the application is whether data is acquired from said user over the Internet via a packet-switched protocol. It is well known in the art for software programs to exchange information with users without having to transfer data over the Internet via packet switched protocol (for example: when a user operates a computer program utilizing databases on a personal computer not connected to a network). It is well known in the art that an apparatus creating an interface to determine optimum prices of products could be a software program utilizing databases on a personal computer. It would be obvious to one of ordinary skill in the art at the time of invention to modify the interface as part of an apparatus that calculates optimum prices for products so that it

could exchange information with users without having to transfer data over the Internet via a packet switched protocol because of efficiency.

Delurgio '352 teaches a method for determining the optimal prices using estimated product demand and activity based costs and the applicant calculates the optimal prices using the same items.

Claim 3 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of Delurgio '352. Although the conflicting claims are not identical, they are not patentably distinct from each other (MPEP § 802.01). The only difference between the application and patent is that the application recites the use of engines to perform the optimization calculations and the patent does not. It is well known in the art for engines (system subsystems, modules, compute code, software) to perform calculations. Accordingly, it would be obvious to one of ordinary skill in the art at the time of invention to modify the interface as part of an apparatus to include the means (demand engine and activity based cost engine) to perform calculations that are expressly desired (as displayed/ provided) by the interface.

Claim 4 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 2 of Delurgio '352 for the same reasons as applied to applicant's claim 3 above for obviousness-type double patenting.

Claim 5 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 3 of Delurgio '352 for the same reasons as applied to applicant's claim 3 above for obviousness-type double patenting.

Claim 6 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 4 of Delurgio '352 for the same reasons as applied to applicant's claim 3 above for obviousness-type double patenting.

Claim 7 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 5 of Delurgio '352 for the same reasons as applied to applicant's claim 3 above for obviousness-type double patenting.

Claim 8 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 6 of Delurgio '352 for the same reasons as applied to applicant's claim 3 above for obviousness-type double patenting.

Claim 9 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 7 of Delurgio '352 for the same reasons as applied to applicant's claim 3 above for obviousness-type double patenting.

Claim 10 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 8 of Delurgio '352 for the same reasons as applied to applicant's claim 3 above for obviousness-type double patenting.

Claim 11 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 12 of Delurgio '352 for the same reasons as applied to applicant's claim 3 above for obviousness-type double patenting.

Claim 19 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 9 of Delurgio '352 for the same reasons as applied to applicant's claim 3 above for obviousness-type double patenting.

Claim 20 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 10 of Delurgio '352 for the same reasons as applied to applicant's claim 3 above for obviousness-type double patenting.

Claim 21 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 11 of Delurgio '352 for the same reasons as applied to applicant's claim 3 above for obviousness-type double patenting.

Claim 22 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 20 of Delurgio '352. Although the

conflicting claims are not identical, they are not patentably distinct from each other (MPEP § 802.01). The essential differences between the patent and the application is that the applicant models the relationship between potential prices and market demand, determines demand chain costs based on market demand, and then uses market demand and demand chain costs in the optimization whereas the patent describes the prices are optimized using modeled market demand and calculated demand chain costs. It is well known in the art that computer/server-based computer programs (demand engines, controllers) to model relationships between prices and demand. It is also well known in the art that computer/server-based computer programs (activity based cost engines, controllers) to estimate/ calculate demand chain costs for products based on market demand. It would be obvious to one of ordinary skill in the art at the time of invention to modify the interface as part of an optimization server that included the means (demand engine and activity based cost engine) used by the applicant to perform calculations that are expressly desired by the interface because of efficiency.

Claim 23 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 29 of Delurgio '352 for the same reasons as applied to applicant's claim 22 above for obviousness-type double patenting.

Claim 24 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 32 of Delurgio '352 for the same reasons as applied to applicant's claim 22 above for obviousness-type double patenting.

Claim 25 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 33 of Delurgio '352 for the same reasons as applied to applicant's claim 22 above for obviousness-type double patenting.

Claim 26 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 30 of Delurgio '352 for the same reasons as applied to applicant's claim 22 above for obviousness-type double patenting.

Claim 27 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 31 of Delurgio '352 for the same reasons as applied to applicant's claim 22 above for obviousness-type double patenting.

Claim 28 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 21 of Delurgio '352 for the same reasons as applied to applicant's claim 22 above for obviousness-type double patenting.

Claim 29 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 22 of Delurgio '352 for the same reasons as applied to applicant's claim 22 above for obviousness-type double patenting.

Claim 30 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 23 of Delurgio '352 for the same reasons as applied to applicant's claim 22 above for obviousness-type double patenting.

Claim 31 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 27 of Delurgio '352 for the same reasons as applied to applicant's claim 22 above for obviousness-type double patenting.

Claim 32 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 28 of Delurgio '352 for the same reasons as applied to applicant's claim 22 above for obviousness-type double patenting.

Claim 33 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 24 of Delurgio '352 for the same reasons as applied to applicant's claim 22 above for obviousness-type double patenting.

Claim 34 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 25 of Delurgio '352 for the same reasons as applied to applicant's claim 22 above for obviousness-type double patenting.

Claim 35 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 26 of Delurgio '352 for the same reasons as applied to applicant's claim 22 above for obviousness-type double patenting.

Claim 36 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 25, and 27-28 of Delurgio '352. Although the conflicting claims are not identical, they are not patentably distinct from each other (MPEP § 802.01).

Claim 27 (Delurgio '352) teaches a method to provide an interface that generates optimized product prices corresponding to a set of products selected from within a product category. Claim 28 (Delurgio '352) teaches a method that utilizes product sales history for a plurality of stores and provides the user a plurality of data entry templates. Claim 27 (Delurgio '352) teaches a method having a price optimization apparatus that provides a template to determine / specify the products to which the optimal prices will be calculated according to modeled demand. Claim 28 (Delurgio '352) teaches a method having a price optimization apparatus that provides a method to determine rules and constraints for generating optimal prices. Claim 25 (Delurgio '352) teaches a method having a price optimization apparatus that allows the user to optimize according to net profit, revenue, or volume and using both modeled market demand and estimated demand chain costs for the products.

The essential differences between the application and the patent is that the application claims a method for determining optimized product prices utilizing a

centralized web server accessed by users operating thin web clients while the patent claims does not mention centralized web servers or thin web clients. It is well known in the art that computer programs and associated databases could be stored on a centralized web server and accessed by users operating thin web clients (for example: MICROSOFT® Internet Explorer browsers on personal computers) remotely via an Internet network involving Internet web pages for communication. It is also well known in the art that a database could be created that contains the product sales history for particular stores and groups of stores. It would be obvious to one of ordinary skill in the art at the time of invention to co-locate the optimization software program and sales history data on a centralized server that is accessible via the Internet to users operating thin web clients because of efficiency of communication.

Claim 37 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 25, 27-28, and 32 of Delurgio '352. Although the conflicting claims are not identical, they are not patentably distinct from each other (MPEP § 802.01) according to the reasoning applied above for claim 36.

Claim 38 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 25, 27-28, and 21 of Delurgio '352. Although the conflicting claims are not identical, they are not patentably distinct from each other (MPEP § 802.01) according to the reasoning applied above for claim 36.

Claim 39 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 25, 27-28, and 23 of Delurgio '352. Although the conflicting claims are not identical, they are not patentably distinct from each other (MPEP § 802.01) according to the reasoning applied above for claim 36.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. **Claim 1-11 and 22-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ouimet (U.S. Patent 6,094,641) in view of Morgan (U.S. Patent 5,799,286).**

Regarding claims 1 and 22, Ouimet teaches a computerized modeling system (apparatus, device, interface, computer-implemented method) to determine the optimum prices/ demand/ promotion for product(s). The pricing system comprises:

- a program (scenario/ result processor, apparatus, device) to enable the user to prescribe an optimization scenario and be presented with the determined optimum prices (column 3, line 44 through Column 4, line 23).
- a program (demand engine, controller) configured to model the relationships between prices and market demand/ sales (column 4, lines 35-44).
- a program (optimization engine, controller) to use the said demand engine and cost calculations to determine optimal prices/ promotions (column 3, lines 30-33 and column 4, lines 16-19). The system calculates the optimum prices/ promotions for a standard of merit, in this case profit (column 6, lines 2-5).

Ouimet does not teach the method of calculating costs via an activity-based costing model configured to estimate demand chain costs for products based on market demand.

Morgan discloses an automated activity-based management system designed to calculate the demand chain costs for products (column 20, lines 24-35).

Oiumet and Morgan are in the analogous art of providing financial decision tools to businesses to improve their profitability. It would have been obvious to a person of ordinary skill in the art at the time of invention to combine the teachings of Ouimet and Morgan to determine the optimal price/ promotion plan to achieve profitability using more thorough costing methodology for the advantages of accuracy.

Regarding claims 2, 7, 11, and 23, Ouimet teaches a pricing system that includes:

- a program (input/ output processor, scenario controller, apparatus, device) to acquire data relating to the optimization scenario from the user and then later distributes the results to the user in a format consistent with the optimization determination/ results (column 3, lines 3-9 and column 4, lines 21-23).
- a program (template controller, apparatus, device) to allow for prescription of optimization scenario and distribution of results (column 3 line 63 to column 4 line 2, column 4 lines 30-33, lines 39-42). In addition, it is obvious and well known in the art of computer-based optimization software programs that the scenario definition information would have to be in an organized format

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(template) suitable to be understood by a computer and configured to enable said user to prescribe scenario parameters.

- A program (command interpreter, apparatus, device) to extract user commands from the first templates (forms, organized data fields) and configured to populate the result templates (column 3, lines 48-51, lines 58-60, lines 63-66).

Regarding claims 3-4 and 24-25, Ouimet teaches a pricing system that receives instructions via the Internet (column 3, lines 34-41). Information exchanged via the Internet inherently uses packet switched protocol and TCP/IP. The Internet refers specifically to the DARPA Internet and the TCP/IP protocols it uses. The Internet is a collection of packet-switching networks and routers that uses the TCP/IP protocol suit and functions as a single, cooperative virtual network (Visit URL <http://www.wdvl.com/Internet/> for more information about the Internet).

Regarding claims 5 and 26, Ouimet teaches a pricing system where the user interactively provides and receives data to/ from the system (Column 4, line 35-39).

Regarding claims 6 and 27, Ouimet teaches a pricing system where the input data is acquired from a source file and results data are distributed to a destination file designated by the user (Column3, lines 17-26, 30-33, 36-40).

Regarding claims 8-10 and 28-30, Ouimet teaches a pricing system that receives instructions via the Internet (Column 3, lines 34-41). Ouimet does not teach that input/output information via templates (forms, organized data fields) is provided via hypertext markup language (HTML), extensible markup language (XML), or JAVA™ applets. Official action is taken that it is well known in the art to create input/ output templates (forms, organized data fields) to exchange information over the Internet. It would be obvious to one of ordinary skill in the art at the time of invention to provide input/ output templates (forms, organized data fields) using HTML, XLM, or JAVA™ applets to exchange information over the Internet between the user and the pricing system.

12. Claim 19-21, 31-32, and 34-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ouimet in view of Morgan as applied to claims 1-11 and 22-30 and in further view of Tellis (1995).

Regarding claims 19-21 and 34-35, Ouimet teaches a computerized modeling system (apparatus, device, interface, computer-implemented method) to determine the optimum prices/ demand/ promotion for product(s). Ouimet does not expressly teach an optimization model/ system/ apparatus to:

- specify multiple figures of merit (objective functions) for the optimization and limits for changes in sales volume.
- specify result data comprising optimized values and percent change values for one or more of the following: volume, revenue, product cost, gross margin, and net profit.

- Present result data graphically.

Tellis teaches a price system that

- expected users of the optimization program would be interested in sales (example: number of units sold or revenue) and profits (Tellis page 272, lines 15-16).
- price optimization results can be displayed graphically (Tellis page 293, Figure 8).

Official notice is taken that it is old and well known in the art that improvements from a baseline situation are typically expressed in terms as a percent.

Ouimet, Morgan, and Tellis are in the analogous art of providing financial planning tools. It would be obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Ouimet, Morgan, and Tellis to create an optimal pricing system based on an accurate activity based costing that provides the user the ability to customize the optimization scenario for the advantage of convenience.

Regarding claims 31-32, Ouimet teaches a computerized modeling system (apparatus, device, interface, computer-implemented method) to determine the optimum prices/ demand/ promotion for product(s). Ouimet does not expressly teach an optimization model/ system/ apparatus to:

- consider highly correlated, normally substitute, and complementary products

- specify products spanning a plurality of demand groups
- specify store locations for the optimization
- specify time horizons
- constrain maximum price change swings

Tellis teaches a pricing system that includes discussion regarding:

- the ability to set-up (specify using a template) an optimization scenario for a plurality of demand groups (product categories), each configured to categorize products that may be substitute or complementary products (Tellis p. 273, lines 22-24).
- the ability to set-up (specify using a template) an optimization scenario for specific products that could be in (or span) multiple product categories (Tellis p. 273, lines 22-24).
- the need to set-up (specify using a template) an optimization scenario for store identification and location information wherein the sales data is used for those stores (Tellis p. 277, lines 34-36).
- the ability to set-up (specify using a template) an optimization scenario for a time horizon, for specifying a time period (duration) for which optimum prices are determined (Tellis p. 272, lines 1-3, page 274, lines 4-5).
- the ability to set-up (specify using a template) rules/ constraints that determine optimum prices including the maximum allowable price swing for the products for sale and the maximum allowable swing for the average price

swing of a demand group (page 274, equation 1a, and page 275 lines 28-29).

The price of each product in Tellis' model is limited to negative price swings as his discount term "Disc" is constrained to be positive.

Ouimet, Morgan, and Tellis are in the analogous art of providing financial planning tools. It would be obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Ouimet, Morgan, and Tellis to create an optimal pricing system based on an accurate activity based costing that provides the user the ability to customize the optimization scenario for the advantage of convenience.

Regarding claim 36, Ouimet teaches a computerized modeling system (apparatus, device, interface, computer-implemented method) to determine the prices for product(s) corresponding to optimum profits (column 2, lines 12-15).

Ouimet does not expressly teach an optimization model/ system/ apparatus to:

- Select products from a product category
- Store product attribute and sales history data for a plurality of stores within a centralized database
- Employ a web server to provide user with a plurality of input/ output web pages that prescribe the sales data to be used, as well as rules and constraints
- Allow a user computer executes a thin web client to access the optimization input/ output web pages

Tellis teaches a pricing system that includes discussion regarding:

- the ability to set-up (specify using a template) an optimization scenario for specific products that could be in product categories (Tellis p. 273, lines 22-24).
- the ability to set-up (specify using a template) an optimization scenario to select the store locations where the sales of the products used in the optimization will be sold (Tellis p. 277, lines 34-36).
- the ability to set-up (specify using a template) rules/ constraints that govern the determination of the optimum prices (page 275 lines 28-29).

Ouimet teaches a pricing system that receives instructions via the Internet (column 3, lines 34-41). Official action is taken that it is well known and old that computer programs and associated databases could be stored on a centralized web server and accessed by users operating thin web clients (for example: MICROSOFT® Internet Explorer browsers on personal computers) remotely via an Internet network involving Internet web pages for communication. It is also well known that a database could be created that contains the product sales history for particular stores and groups of stores.

It would be obvious to one of ordinary skill in the art at the time of invention to co-locate the optimization software program and sales history data on a centralized server

that is accessible via the Internet to users operating thin web clients to efficiently transfer information.

Ouimet, Morgan, and Tellis are in the analogous art of providing financial planning tools to businesses to improve their profitability. It would have been obvious to a person of ordinary skill in the art at the time of invention to combine the teachings of Ouimet, Morgan, and Tellis to determine the optimal price/ promotion plan to achieve profitability using more thorough costing methodology for the advantages of accuracy.

Regarding claim 37, Ouimet teaches a pricing system that receives instructions via the Internet (Column 3, lines 34-41). Information exchanged via the Internet inherently uses packet switched protocol (Visit URL <http://www.wdvl.com/Internet/> for more information about the Internet).

Regarding claims 38-39, Ouimet does not teach that input/ output information via templates (forms, organized data fields) is provided via hypertext markup language (HTML) or JAVA™ applets. Official action is taken that it is well known in the art to create input/ output templates (forms, organized data fields) to exchange information over the Internet. It would be obvious to one of ordinary skill in the art at the time of invention to provide input/ output templates (forms, organized data fields) using HTML or JAVA™ applets to exchange information over the Internet between the user and the pricing system.

Allowable Subject Matter

13. Claims 12-18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all the limitations of the base claim and any intervening claims.

Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a) Cunningham (U.S. Patent 6,029,139) teaches a system and method of evaluating and optimizing promotional plans for products, segments of products, or categories of products.

b) Montgomery, A. "Creating Micro-Marketing Pricing Strategies Using Supermarket Scanner Data" teaches how prices can be profitably customized at the store-level.

c) Abraham, M.M. "Promoter: An Automated Promotion Evaluation System," teaches a system and methodology for evaluating manufacturers' trade promotions which may be combined with consumer promotions.

d) Cerf, V.G. and R.E. Kahn, "A Protocol for Packet Network Interconnection," IEEE Transactions on Communications COM-22, May 1974, (pages 637-648) teaches the exchange of data over an Internet or network using a packet-switched protocol such as TCP/IP.

e) Berners-Lee, T. "Hypertext Markup Language 2.0 Working Paper," November 1995, (<http://ftp.ics.uci.edu/pub/ietf/html/rfc1866.txt>) teaches the method of creating templates for data input and/or output in hypertext markup language, commonly known as HTML

f) Bosak, J and World Wide Web Consortium. "Extensible Markup Language (XML)," December 1997, (<http://www.w3.org/TR/PR-xml-971208.html>) teaches the

method of providing templates for data input and/or output using extensible markup language – XML.

g) Flanagan, D. "JavaScript: The Definitive Guide, 3rd Edition," published by O'Reilly in June 1998 with an ISBN of 1-56592-392-8 (section 14.8) teaches the method or computer-based program that provides templates for data input and/or output using JAVA™ applets.

h) Auerbach, A.A. - US Patent 3,017,610 - June 1962, (column 1, paragraph 1) teaches a method or computer-based apparatus that provides input data to a computer program via an electronic source file and distributes the optimization results from a computer program via a destination electronic file.

i) Abraham, M. "An Implemented System For Improving Promotion Productivity using Store Scanner Data," Marketing Science Vol. 12, No. 3, Summer 1993, pages 259, Table A) teaches sales changes from a baseline in terms of a percentage.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen Bylcw whose telephone number is 571-272-8125. The examiner can normally be reached on weekdays, 8AM-5PM Eastern.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz can be reached on 571-272-6729. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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SB SB – 5/27/2005



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